

Environmental Science Syllabus

Grades 1 – 4

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Introduction

Environment is defined as denoting the surroundings or external conditions with which an individual (person or other living organism) or community interacts. Natural environments include the earth's physical features, plants and animals. Human environments include not only built environments but also social environments (e.g. patterns of behavior, political and economic systems) and cultural environments (e.g. artistic, religious, ethnic, scientific, technological and recreational). Environmental science which, as a subject, is delivered in the first cycle of primary education encompasses all these aspects of environment. In so doing, it integrates a number of subjects, i.e., physical science, life science, social science, health, agriculture, home economics and handicraft.

Environmental science emphasizes the centrality of the child's immediate environment. As the children mature, the wider locality is examined, as are other environments in Ethiopia. This progression from the local and immediate to the wider world contributes to children's development in a number of ways. It fosters not only their sense of local identity but their sense of being members of national communities. It encourages them to appreciate the interdependence of individuals, groups, and communities, and it promotes an understanding of and a respect for the cultures and ways of life of peoples throughout the country. It fosters, too, an informed sense of individual and community responsibility for environmental care. Environmental science provides specific opportunities to enable children to understand themselves, to develop healthy relationships, and to establish and maintain healthy patterns of behavior. In fostering a range of personal and social qualities and dispositions, it helps children to develop a foundation of life skills, scientific enquiry skills, knowledge and attitudes that will inform their decision-making in the social, personal and health dimensions of their lives, both now and in the future. It also helps to prepare children for active and responsible citizenship.

The environmental science syllabuses for grades 1 to 4 are prepared based on the new curriculum framework for Ethiopian schools and on the needs assessment conducted prior to the revision work. The syllabuses have also considered international content standards of a similar age and grade level of learners. The Competencies and contents are derived from the minimum learning competencies designed for the four grade levels. Agriculture, technology and AIDS are integrated in a much broader manner in response to the recommendations of the needs assessment. The needs assessment has

indicated areas in the curriculum where contents are too difficult for children and grade levels where contents are overloaded. This syllabus has removed some difficult contents and retained others by simplifying them. The content overload has also been addressed by limiting details of contents and reducing the highly prescriptive methodology. Large content details and highly prescriptive methodology were proved to result in big volumes of textbooks which teachers found difficult to complete in an academic year.

The new curriculum framework for Ethiopian schools has allotted seven periods per week for environmental science. Even though the academic calendar is made up of 40 weeks, the syllabus is prepared for 30 weeks (210 periods) creating a wider chance for teachers to use about six extra weeks for tasks of helping students that need further assistance and even for revision and student projects. In addition to getting more relaxed time for activities this also insures that the curriculum be covered rightly in the academic year. The distribution of periods for each unit and sub-unit of each grade level is indicated in the table at the end of this introduction. It should be noted that periods allocated for the sub-units of each unit, throughout the syllabus, are proposed leaving a room for teachers' freedom of using them flexibly. A teacher who finished the content before the allocated time could freely use the remaining periods for the succeeding content and so on.

The framework has clearly indicated that continuous assessment should be part of the teaching learning process and be done using oral, written and practical work. Therefore, this syllabus expects teachers to conduct continuous assessment throughout each term in the form of classroom exercises (written or oral), tests, homework/assignments, assessment of practical and field works, reports of project activities and personal inventories. In this syllabus, at the end of each unit, are given assessment descriptions, based on competencies, in order to help teachers focus their continuous assessments around them and make sure whether the ones set as standard competencies are achieved or not. In the assessment, the statement "minimum requirement level" should not be misleading and should be understood as the "standard working at the standard level are expected to achieve the competencies set for the grade level successfully. Teachers should give special considerations for those who are working above and below the standard levels by encouraging the ones that work above the

standard and by giving extra attention for those who work below the standard.

Finally, it should be underlined that the key players in the proper implementation of the environmental science curriculum are not only

Supervision of their activities. The school management should provide moral and material support for environmental science activities in the school such as plot of land for agricultural activities and establishing linkages between the community, relevant institutions and activities initiated by the subject such as tree planting. The community should avail community resources for the teaching of environmental science especially when students are required to demonstrate active participation in community undertakings.

This document of grades 1 – 4 environmental science syllabuses was reviewed, discussed and finalized by a National workshop (October 1-10, 2007) held at the premises of the Curriculum Framework Development Department of the MOE and at which 16 federal, regional and international curriculum experts participated. It was finalized by the following team of experts

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students and teachers. Parents, school management, community and government (both central and regional) have important roles. Parents should provide opportunities for their children to practice at home the knowledge and skills they have learnt at school. They should give necessary advice and

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**Allotment of Periods
for Units and Sub-units of Environmental Science
Grades 1 – 4**

<i>Grade</i>	<i>Unit</i>	<i>Sub-unit</i>	<i>Number of Periods</i>	
			<i>Sub-unit</i>	<i>Total</i>
1	Unit 1: Ourselves	1.1 Our external body parts 1.2 Our basic needs 1.3 Common diseases that affect us 1.4 The five sense organs	10 8 11 28	57
	Unit 2: Our family	2.1 Family members 2.2 Our family needs food, shelter and clothing 2.3 Household materials	11 17 20	48
	Unit 3: Our school	3.1 Our school compound 3.2 We respect rules and regulations 3.3 We have good personal relationship 3.4 Road safety 3.5 Activities we can do in our school	12 12 6 12 6	48
	Unit 4: Our locality – kebele	4.1 Location of our Kebele 4.2 Non living things around us 4.3 Living things around us 4.4 Common activities of our local people 4.5 Transportation in our locality	9 13 9 13 13	57
2	Unit 1: Ourselves	1.1 The food we eat 1.2 We are healthy! 1.3 We keep our personal hygiene	17 17 17	51
	Unit 2: Our community	2.1 Members of our community 2.2 Living in the community 2.3 Our community needs energy 2.4 Making objects from clay or plasticine and paper	15 14 9 15	53
	Unit 3: Our natural environment	3.1 Natural phenomena 3.2 Natural resources 3.3 Plants around us 3.4 Animals around us	17 13 15 13	58

Grade	Unit	Sub-unit	Number of Periods	
			Sub-unit	Total
	Unit 4: Our woreda or sub-city	4.1 Location of our woreda 4.2 Types of landforms of our woreda 4.3 Institutions in our woreda 4.4 Economic activities of the woreda	13 10 9 17	49
3	Unit 1: Food and family wellbeing	1.1 Food 1.2 Family hygiene 1.3 Leisure and recreation	20 15 10	45
	Unit 2: Our natural environment	2.1 Natural resources 2.2 Energy 2.3 Force 2.4 Measurement	25 15 17 11	68
	Unit 3: Activities in our community	3.1 Farming 3.2 Local industrial products	30 12	42
	Unit 4: Our region	4.1 Location 4.2 Major land forms 4.3 Regional and national flags 4.4 Administrative structure 4.5 Heritage 4.6 Patriots of the region	5 10 5 10 15 10	55
4	Unit 1: Our body	1.1 Our body needs food 1.2 Blood circulation 1.3 Puberty 1.4 Family planning	10 15 15 15	55
	Unit 2: Our natural environment	2.1 Matter 2.2 Natural resources 2.3 Energy 2.4 Water	15 15 20 5	55
	Unit 3: Our country	3.1 What is country? 3.2 Major economic activities in Ethiopia	25 30	55
	Unit 4: Our social environment	4.1 Historical and cultural heritages of Ethiopia 4.2 Social relations and values	30 15	45